IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of Atty. Docket

PAUL R. SIMONS ET AL. GB 020216

Confirmation No. 1867

Serial No. 10/538,283 Group Art Unit: 2617

Filed: JUNE 10, 2005 Examiner: ZEWARI, S.T.

Title: LOCATION TRACKING OF PORTABLE DEVICES IN A WIRELESS

NETWORK

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### APPEAL BRIEF

Sir:

Appellants herewith respectfully present a Brief on Appeal as follows, having filed a Notice of Appeal on June 2, 2009:

### REAL PARTY IN INTEREST

The real party in interest in this appeal is the assignee of record Koninklijke Philips Electronics N.V., a corporation of The Netherlands having an office and a place of business at Groenewoudseweg 1, Eindhoven, Netherlands 5621 BA.

### RELATED APPEALS AND INTERFERENCES

Appellants and the undersigned attorney are not aware of any other appeals or interferences which will directly affect or be directly affected by or having a bearing on the Board's decision in the pending appeal.

### STATUS OF CLAIMS

Claims 1-4 and 6-19 are pending in this application, where claim 5 had been previously canceled. Claims 1-4 and 6-19 are rejected in the Final Office Action mailed in March 3, 2009. This rejection was upheld, in the Advisory Action that was mailed on May 7, 2009. Claims 1-4 and 6-19 are the subject of this appeal.

### STATUS OF AMENDMENTS

Appellants filed on April 28, 2009 an after final amendment in response to a Final Office Action mailed March 3, 2009. The after final amendment included amendments to the claims 3, 6, 8-9 and 13. In an Advisory Action mailed on May 7, 2009, it is indicated that the after final amendment filed on April 28, 2009 will be entered, but does not place the application in condition for allowance. This Appeal Brief is in response to the Final Office Action mailed March 3, 2009, that finally rejected claims 1-4 and 6-19, which remain finally rejected in the Advisory Action mailed on May 7, 2009.

### SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention, for example, as recited in independent claim 1, shown in FIG 1 and described on page 2, lines 3-10, page 6, line 4 to page 7, line 7 of the specification, is directed to a method for opportunistically tracking the location of a portable device 10a in a wireless infrastructure 12 comprising at least one fixed station 14a operable to communicate wirelessly with the portable device 10a. The method comprises the portable device 10a providing its unique device identifier to the station 14a when within communication range of the station 14a, and generating association data comprising the unique device identifier with the location of the station 14a, as described on page 8, lines 1-19. As described on page 8, line 20, to page 9, line 10, the association data is uploaded via a backchannel to a remote database 20 where the data is stored. As shown in FIG 4, and described on page 8, lines 20-30, the association data comprises time and date of reception of the unique device identifier together with the unique device identifier and the location of the station. station 14a uploads the association data to the remote database 20, where the association data further comprises the leaving time shown in FIG 4, the leaving time being when the portable device left the communication range of the station 14a.

The present invention, for example, as recited in independent claim 8, shown in FIG 1 and described on page 2, lines 11-19, page 6, line 4 to page 7, line 7 of the specification, is directed to a system for opportunistically tracking the location of a portable device 10a having a unique device identifier associated therewith, comprising a wireless infrastructure 12 having at least one fixed station 14a; station receiving means such as the radio module 141 shown in FIG 2 and described on page 7, lines 7-23, for receiving the unique device identifier transmitted by the portable device 10a when within communication range; generation means, such as an infrastructure computer 18 shown in FIG 1 and described on page 8, lines 12-19, for generating data comprising the unique device identifier with the location of the station 14a; and uploading means, such as the infrastructure computer 18 as described on page 9, lines 2-10, for uploading the generated association data via a backchannel to a remote database 20 where the data is stored.

As described on page 8, line 1, to page 9, line 10, the station 14a generates association data comprising time and date of unique identifier reception together with the unique device identifier and the location of the station, and the station 14a uploads the association data to the remote database 20. As shown in FIG 4, and described on page 8, lines 20-30, the association data further comprises a leaving time, the leaving time being when

the portable device 10a left the communication range of the station 14a.

### GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-4, 6, 8-10, 13 and 15-18 of U.S. Patent Application Serial No. 10/538,283 are unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 6,574,482 (Radomsky) in view of U.S. Patent No. 6,496,806 (Horwitz) and U.S. Patent No. 5,515,426 (Yacenda).

Whether claims 7 and 14 of U.S. Patent Application Serial No. 10/538,283 are unpatentable under 35 U.S.C. §103(a) over Radomsky in view of U.S. Patent Application No. 2004/0198308 (Hurst).

Whether claims 11-12 and 17 of U.S. Patent Application Serial No. 10/538,283 are unpatentable under 35 U.S.C. §103(a) over Radomsky in view of U.S. Patent Application Publication No. 2004/0077309 (Brass).

Whether claims 18 and 19 of U.S. Patent Application Serial No. 10/538,283 are unpatentable under 35 U.S.C. §103(a) over Radomsky in view of U.S. Patent No. 6,915,135 (McKee).

### **ARGUMENT**

Claims 1-4, 6, 8-10, 13 and 15-18 are said to be unpatentable over Radomsky, Horwitz and Yacenda.

Appellants respectfully request the Board to address the patentability of independent claims 1 and 8, and further claims 2-4, 6-7 and 9-19 as depending from claim 1, based on the requirements of claims 1 and 8. This position is provided for the specific and stated purpose of simplifying the current issues on appeal. However, Appellants herein specifically reserve the right to argue and address the patentability of claims 2-4, 6-7 and 9-19 at a later date should the separately patentable subject matter of claims 2-4, 6-7 and 9-19 later become an issue. Accordingly, this limitation of the subject matter presented for appeal herein, specifically limited to discussions of the patentability of claims 1 and 8 is not intended as a waiver of Appellants' right to argue the patentability of the further claims and claim elements at that later time.

Radomsky is directed to a portable badge including an RF transmitter for communication with a fixed reader having an IR and RF receiver mounted in a room.

As correctly noted on page 4 of the Final Office Action,
Radomsky does not disclose or suggest that the association data

further comprises a leaving time of when the portable device left the communication range of the station, as recited in independent claim 1 and 8. Horwitz is cited in an attempt to remedy the deficiencies in Radomsky.

Horwitz is directed to a method and system for tracking each item in a cluster of items. It is alleged that column 10, lines 36-40 and column 4, lines 26-29 disclose data comprising a leaving time of when a portable device left the communication range of a station, as recited in independent claim 1 and 8.

Column 10, lines 36-40 of Horwitz specifically recite:

The cluster <u>ID</u> along with any <u>location tag</u> that were identified in the same read are <u>stored together</u> <u>with a time date</u> stamp in a location list for each cluster ID that was determined as present in that read. (Emphasis added)

Column 4, lines 26-29 specifically recite:

Indeed, a system that can read multiple tags with a high degree of accuracy is required to make an RFID system viable for a wide range of applications. (Emphasis added)

It is respectfully submitted that column 10, lines 36-40 and column 4, lines 26-29 of Horwitz merely disclose storing together a location list an ID, location tag, and a time date stamp; and reading multiple tags. Such disclosure does not teach or suggest the present invention as recited in independent claim 1, and similarly recited in independent claim 8 which, amongst other

patentable elements, recites (illustrative emphasis provided):

the <u>station uploads</u> said <u>association data</u> <u>to</u> <u>the remote database</u>, and wherein <u>the association</u> <u>data further comprises</u> a <u>leaving time</u>, the leaving time being when the portable device left the communication range of said station.

These features are nowhere disclosed or suggested in Radomsky, Horwitz, and combination thereof. Rather, Horwitz merely discloses storing together an ID, location tag, and a time date stamp. The disclosure of storing a time date stamp does not disclose or suggest uploading a leaving time. Even assuming, arguendo, that 'storing' is equivalent to 'uploading', which it is not, there is still no disclosure of uploading the leaving time, as recited in independent claims 1 and 8.

Further, Yacenda specifically recites on column 13, lines 34-37:

According to a preferred method of the present invention, the PBX 10 and/or computer 20 archives each user's location in memory, preferably the five last locations of each user and time stamps each new location **entry**.

The disclosure of "storing the time date stamp" in Horwitz, and disclosure of "time stamps each new location entry" in Yacenda do not disclose or suggest uploading the leaving time, as recited in independent claims 1 and 8. Radomsky, Horwitz, Yacenda, and combination thereof, do not even disclose or suggest any leaving time, let alone disclosing or suggestion uploading the leaving time

to a remote server.

Further, it is respectfully submitted that the cited references are not merely attacked individually, as alleged on page 2, paragraph three of the Final Office Action. Rather, none of the cited references, alone or in combination, disclose or suggest generating and uploading association data that includes the <a href="Leaving time">leaving</a> time when the portable device left the communication range of the station, as recited in independent claims 1 and 8.

Even the combination of the three references, namely,

Radomsky, Horwitz and Yacenda, with other cited references such as

McKee, still does not disclose or suggest generating and uploading

association data that includes the <u>leaving time</u>, as recited in

independent claims 1 and 8. For example, McKee discloses a "system

(10) for determining a presence, identity, and <u>duration</u> of presence
in a given area of an object." (Abstract; emphasis added)

It is respectfully submitted that even if the leaving time is derivable form the "time date stamp" of Horwitz, or the "duration of presence" of McKee, the fact remains that none of the cited references, alone or in combination, disclose or suggest leaving time generating and uploading association data that includes the leaving time, as recited in independent claims 1 and 8.

At best, the cited reference disclose the time and date of where a tracked item is located. Such a disclosure does not

suggest generating and uploading association data that includes the leaving time. Independent claims 1 and 8 do not merely recite time/date stamping, but specifically recite generating and uploading the leaving time, which is nowhere disclosed or suggested in Radomsky, Horwitz, Yacenda, as well as McKee, and combinations thereof.

Accordingly, it is respectfully submitted that independent claims 1 and 8 are allowable, and allowance thereof is respectfully requested. In addition, it is respectfully submitted that claims 2-4, 6, 9-10, 13 and 15-18 should also be allowed at least based on their dependence from independent claims 1 and 8.

# Claims 7 and 14 are said to be unpatentable over Radomsky and Hurst.

It is respectfully submitted that claims 7 and 14 should be allowed at least based on their dependence from independent claims 1 and 8.

# Claims 11-12 and 17 are said to be unpatentable over Radomsky and Brass.

It is respectfully submitted that claims 11-12 and 17 should be allowed at least based on their dependence from independent claims 1 and 8.

Claims 18 and 19 are said to be unpatentable over Radomsky and McKee.

It is respectfully submitted that claims 18 and 19 should be allowed at least based on their dependence from independent claims 1 and 8.

In addition, Appellants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Appellants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

## CONCLUSION

Claims 1-4 and 6-19 are patentable over Radomsky, Horwitz, Yacenda, Hurst, Brass, and McKee.

Thus, the Examiner's rejections of claims 1-4 and 6-19 should be reversed.

Respectfully submitted,

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#### CLAIMS APPENDIX

1. (Previously Presented) A method for opportunistically tracking the location of a portable device in a wireless infrastructure comprising at least one fixed station operable to communicate wirelessly with said portable device, comprising:

the portable device providing its unique device identifier to the station when within communication range of said station,

generating association data comprising the unique device identifier with the location of said station, and

uploading said association data via a backchannel to a remote database wherein said data is stored;

wherein the association data comprises time and date of reception of the unique device identifier together with the unique device identifier and the location of the station, and the station uploads said association data to the remote database, and wherein the association data further comprises a leaving time, the leaving time being when the portable device left the communication range of said station.

2.(Previously Presented) The method according to claim 1 wherein upon receipt of the unique device identifier, the station

transmits said identifier and its station identifier to an infrastructure computer.

- 3.(Previously Presented) The method according to claim 2 wherein the infrastructure computer receives said station identifier and said unique device identifier, and generates the association data.
- 4.(Previously Presented) The method according to claim 3 wherein the infrastructure computer uploads said association data to the remote database.

### Claim 5 (Canceled)

- 6. (Previously Presented) The method according to claim 1, wherein a client terminal connects with the remote database, and wherein said remote database is operable to supply the association data to said client terminal in dependence on the client supplying the unique device identifier.
- 7. (Previously Presented) The method according to claim 6, wherein the supply of the association data is supplied in exchange for a fee.

8.(Previously Presented) A system for opportunistically tracking the location of a portable device having a unique device identifier associated therewith, comprising a wireless infrastructure having at least one fixed station, station receiving means for receiving the unique device identifier transmitted by said portable device when within communication range, generation means for generating data comprising the unique device identifier with the location of said station, and uploading means for uploading said generated association data via a backchannel to a remote database wherein said data is stored;

wherein the station generates association data comprising time and date of unique identifier reception together with the unique device identifier and the location of the station, and the station uploads said association data to the remote database, and wherein the association data further comprises a leaving time, the leaving time being when the portable device left the communication range of said station.

9.(Previously Presented) The system according to claim 8, further comprising an infrastructure computer in communication with the at least one fixed station of said infrastructure and the remote database, said computer having stored information relating

to the location of the at least one station, and wherein said at least one station is configured to communicate the received unique device identifier to the computer, and wherein said computer generates and uploads said association data to the remote database via the backchannel.

- 10.(Previously Presented) The system according to claim 8, wherein communication between the at least one station and the portable device is performed via a wireless protocol in which devices are assigned unique identifiers.
- 11.(Previously Presented) The system according to claim 10, wherein the protocol is the ZigBee protocol.
- 12.(Previously Presented) The system according to claim 10, wherein the protocol is the Bluetooth protocol.
- 13.(Previously Presented) The system according to claim 10, further comprising a remote client terminal operable to establish a connection with the remote database, and wherein said remote database is operable to supply the association data to said remote client terminal in dependence on the remote client terminal supplying the unique device identifier.

- 14.(Previously Presented) The system according to claim 13, wherein the supply of the association data is supplied in exchange for a fee.
- 15.(Previously Presented) A database for use with the system of claim 8, said database storing location tracking information, the information comprising date, time and location data associated with a unique wireless device identifier, and wherein the database is operable to supply said information in response to a request comprising unique device wireless identifier.
- 16.(Previously Presented) A fixed station for use with the system of claim 8, comprising means for receiving the unique device identifier, means for generating the association data and means for uploading said data to a connected computer.
- 17.(Previously Presented) A portable device having the unique wireless identifier for use with the system of claim 8 in the form of a tag having a ZigBee radio module.
- 18.(Previously Presented) The method of claim 1, wherein the association data further comprises a pattern of detection of the

portable device by a plurality of fixed stations.

19.(Previously Presented) The system of claim 8, wherein the association data further comprises a pattern of detection of the portable device by a plurality of fixed stations.

#### EVIDENCE APPENDIX

None

# RELATED PROCEEDINGS APPENDIX

None